Math 212
Requiz 06A

F 21 Oct 2016 / N 23 Oct 2016

Your name: _____

Exercise

(5 pt) Find an equation for the plane H in $\mathbf{R}^3$ containing the line

$$L : \frac{x+5}{2} = -3y = \frac{6-2z}{3}$$

and passing through the point of intersection of the lines

$$L_1 : \mathbf{r}_1(t_1) = (2-2t_1, -2-6t_1, 10+6t_1) \qquad L_2 : \mathbf{r}_2(t_2) = (2t_2, -2+3t_2, 2+t_2)\,.$$

Hint: Determine the point of intersection of L_1 and L_2. Then find (any) two points on the line L. Use these three points to determine a normal vector, and hence an equation, for the plane H.